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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,696	02/07/2002	Daniel Keith Doe	3029-152	2521

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EXAMINER

RIBAR, TRAVIS B

ART UNIT

PAPER NUMBER

1711

DATE MAILED: 01/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/072,696

Applicant(s)

DOE ET AL.

Examiner

Travis B Ribar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☒ Claim(s) 17 and 31 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election of group I, claims 1-34 in Paper No. 7 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. The original group read claims 1-33 because there is currently no claim 31 in the case and the subsequent claims (33, 34, and 35) were interpreted as claims 32, 33, and 34, respectively.

Claim Objections

3. Claims 17 and 31 are objected to because of the following informalities: They are not present in the current application. This office action will refer to the claims by the number by which they were originally filed. Appropriate correction is required.

Claim Interpretation

4. The word, "omit" in line 2 of claim 34 is interpreted by the examiner to signify that there is no primer present on the surfaces of the substrates in the claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-6, 12-16, 18-24, and 27-30, and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dohi et al. in view of Uemae et al.

Dohi et al. discloses a two-part adhesive system that includes a methyl methacrylate (MMA) (column 2, line 14) and a metal salt (zinc) of MMA (column 2, lines 42-47), meeting those aspects of claims 1-3 and 14-16, and 28. The amount of metal salt (column 2, lines 30-51) meets the restriction of claims 18-19 and the adhesive composition includes benzoyl peroxide as a free radical initiator (column 2, line 40), a reducing agent (column 2, lines 57-62), and a plasticizer (column 3, line 57), fulfilling claims 22-23, 24, and 27, respectively.

Polychloroprene is blended into the adhesive in Dohi et al. as well, meeting that part of claims 4-6. Dohi et al. also discloses using the adhesive to form a laminate of plastic substrates in example 1, meeting the restrictions of claims 29-30 and 32-34. Dohi et al. does not disclose the adhesive mixture split into the exact same two parts the applicant claims and does not include the use of a metal molybdate.

Dohi et al. discloses that pigments are used in the adhesive, but gives no specific pigments that could be used, indicating that a wide range of pigments are suited to the

invention. Uemae et al. discloses the zinc molybdate pigments of claims 12-13 and shows that they are used in adhesive compositions to prevent rust (column 16, line 58).

Regarding the physical makeup of the individual parts of the two-part adhesive in Dohi et al., one skilled in the art would be readily able to manipulate the compositions of the two components to fall within the weight ranges of claims 20-21, for example by taking some of the base material solution from the second part of the adhesive in example one and placing it into the first part of the adhesive, which could be done for ease of application. As for whether or not each material is present in either the first part or the second part of the adhesive, it is well known in the art that since the reason for keeping the two parts of the adhesive separate is to prevent curing, one may make the two parts in any manner such that curing will not take place, which includes the embodiment the applicant claims. Therefore, it would have been an obvious variation on Dohi et al. to make each part of the adhesive physically identical to what the applicant claims, since the final product would not have been altered.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to make the adhesive in Dohi et al. using the zinc molybdate in Uemae et al. and to make the adhesive in the same manner as the applicant claims. The motivation for adding the zinc molybdate would be to improve the rust resistant properties of the adhesive while the motivation for making the adhesive in the same manner the applicant claims would be to ease the application of the adhesive to a substrate. Therefore it would have been obvious to combine Uemae et al. with Dohi et al. to obtain the invention as specified in claims 1-6, 12-16, 18-24, and 27- 33.

7. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dohi et al. in view of Uemae et al. as applied to claim 1 above, and further in view of the applicant's admitted prior art and Damico.

The combined teachings of Dohi et al. and Uemae et al. do not include the adhesion promoting agent the applicant claims in claims 7 and 8. However, the applicant admits that the addition of these adhesion promoting agents to adhesives is well known in the art. Further, Damico discloses (see Table 4) that these adhesion promoting agents are commonly used in acrylic adhesives.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the adhesion promoting agent the applicant claims in the adhesive taught by the combined teachings of Dohi et al. and Uemae et al. The motivation for doing so would be to improve the adhesive properties of the adhesive. Therefore it would have been obvious to combine what is commonly known in the art and Damico with Dohi et al. and Uemae et al. to obtain the invention as specified in claims 7 and 8.

8. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Dohi et al. and Uemae et al. as applied to claim 1 above, and further in view of Briggs et al.

The combined teachings of Dohi et al. and Uemae et al. do not include the use of the core-shell additive that the applicant claims in claims 9-11. This aspect of the

invention is in Briggs et al. The applicant included a copy of Briggs et al. in the Information Disclosure Statement filed June 17, 2002.

Briggs et al. discloses that the core-shell impact modifiers in claims 9-11 are commonly used in adhesives in order to control their flow properties (column 3, line 67 to column 4, line 13). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use MBS impact modifiers in the adhesive taught by the combination of Dohi et al. and Uemae et al. The motivation for doing so would be to control the flow properties of the adhesive. Therefore it would have been obvious to combine Briggs et al. with Dohi et al. and Uemae et al. to obtain the invention as specified in claims 9-11.

9. Claims 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Dohi et al. and Uemae et al. as applied to claim 1 above, and further in view of Hatton.

The combined teachings of Dohi et al. and Uemae et al. do not include the use of a diglycidyl ether of Bisphenol-A in the adhesive. Hatton teaches this aspect of the invention, stating that such compounds are commonly added to adhesives in order to make them tougher (column 16, lines 39-46).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a diglycidyl ether of Bisphenol-A in the adhesive composition taught through the combination of Dohi et al. and Uemae et al. The motivation for doing so would be to make the adhesive tougher. Therefore it would have been obvious to

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combine Hatton with Dohi et al. and Uemae et al. to obtain the invention as specified in claims 25-26.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis B Ribar whose telephone number is (703) 305-3140. The examiner can normally be reached on 8:30-5:00 Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (703) 308-2462. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Travis B Ribar
Examiner
Art Unit 1711

TBR
December 27, 2002



James J. Seidleck
Supervisory Patent Examiner
Technology Center 1700